



YASH ARORA



ACADEMIC DETAILS

Year	Degree / Board	Institute	GPA / Marks(%)
---	M.Sc in Mathematics	Indian Institute of Technology, Delhi	8.2
2014	CBSE	Swami Uma Bharti Public School, Rewari.	86%
2012	CBSE	Swami Uma Bharti Public School, Rewari.	9.2/10

DEGREES PRIOR TO IIT

Year	Degree	Institute	GPA / Marks(%)
2017	B.Sc (Hons) Mathematics	Deshbandhu College, Delhi University	89.69%

COURSES DONE

Algebra, Linear Algebra, Real Analysis, Ordinary Differential Equation, Computer Programming, Complex Analysis, Topology, Mathematical Programming, Numerical Analysis, Measure And Integration

IIT DELHI THESIS

Title: Indefinite Linear Algebra And its Applications using **MATLAB**(July, 2018-Present).

Supervisor: Dr. Puneet Sharma ,Assistant Professor,Department of Mathematics ,IIT-Delhi.

Description: A **Hermitian** invertible matrix defines an Standard indefinite inner product. The inner product may be indefinite (needs not be positive definite) use the model in the study of vibration analysis of structural systems. Analyze the work computationally using Matlab.

Applications

- In Vibration analysis of **rail tracks** excited by high speed trains.
- In Solving **The Linear Quadratic Optimal** Control Problem.

SCHOLASTIC ACHIEVEMENTS

- Secured **AIR 92** in Joint Admission Test(JAM) for M.Sc
- Awarded the **MERIT CUM MEANS Scholarship** by IIT Delhi for extraordinary ACADEMIC PERFORMANCE in the year 2017-18.

Selected And Appeared for Interview At **IISc (Bangalore)** for Admission to **Integrated Phd Programme(2017)**

PROJECTS

Functional Analysis ,Under Dr. Tanmoy Paul (May-July,2018) : Hahn-Banach Theorem, Open Mapping Theorem and Closed Mapping Theorem, Some Basics Concepts Of **Banach Algebra**, Regular and Singular elements, **Resolvent Set** and Spectrum

Matrix Decomposition: Built a **Matlab** Program for Matrix **LU** Decomposition to Find The System Of Solution.

TECHNICAL SKILLS

- **Programming Language** -
 - Basic Knowledge of **C/C++**
 - **MATLAB**, Mathematica, Latex
- **Relevant Courses** : Probability & Statistics, Numerical Analysis, Partial Differential Equation, Functional Analysis, Fuzzy Sets And Applications

EXTRA CURRICULAR ACTIVITIES

- Participated in **Group Dance** On Occasion Of **INDEPENDENCE DAY**.

Other Interests

- Music ,Badminton, Cricket, Movies